

1 ABSTRACT

2 A flexible structural restraint layer for use
3 with an inflatable modular structure, having a fore
4 and aft assembly separated by a longeron and an
5 inflatable bladder, is disclosed and claimed. The
6 restraint layer is comprised of two circumferential
7 strap assemblies, each attachedly fastened at opposing
8 ends of a radial strap assembly. There are a
9 plurality of axial straps that are secured in place to
10 the circumferential strap assemblies and the radial
11 strap assembly. The restraint layer surrounds the
12 bladder and the ends of the axial straps are secured
13 in place at the fore and aft end of the modular
14 structure. When the bladder is inflated, the
15 structural restraint layer distributes the load
16 created by the inflated bladder.